

**REMARKS**

Claims 1-20 are pending. Claims 1-3, 7-9, and 12-15 stand rejected while Claims 4-6, 10, 11, and 16-20 are allowable but objected to as depending from a rejected base claim. Claims 1, 7, 11, and 12 have been amended. In light of the amendments and the following remarks, the Applicant respectfully requests that the Examiner reconsider the rejections and allow all of the pending claims.

**REJECTIONS UNDER 35 USC § 103:** The Examiner Rejected Claims 1, 2, 7, 8, and 12-15 under §102 as being unpatentable over USPN 4,709,250 issued to Takeuchi in view of USPN 5,581,358 issued to Seto

Takeuchi is directed to an image forming apparatus capable of producing a selected pulse width to achieve a desired image density. See Takeuchi, Abstract. To this end, Takeuchi teaches modulating a laser (9) according to a pulse signal (C) having a pulse width (T3). Takeuchi, col. 4, lines 39-46. The modulated laser beam is scanned across a photosensitive member (1) resulting in a surface potential (V) on photosensitive member (1). Takeuchi, col. 4, lines 46-48. The photosensitive member (1) is scanned to identify a value or (V). Takeuchi, col. 4, lines 46-51. Based on that value a microprocessor (20) selects a pulse width for forming a half-tone image of a desired density. Takeuchi, col. 4, lines 51-59.

To select the pulse width, the microprocessor (20) compares the value of (V) with a target half-tone potential value ( $V_H$ ). If  $(V) - (V_H)$  is within a specified tolerance, the pulse width (T3) is used. If not, the microprocessor (20) calculates a new pulse width as a function of (T3). Takeuchi, col. 4, line 43 through col. 5, line 37.

Seto describes a printer that is capable of applying a smoothing process to edge pixels and applying another process to black pixels in which the print pulse width is controlled to save toner. See Seto, Abstract. Seto describes varying pulse width and timing to create various patterns. See, e.g., Seto, Figs. 54A-54E and col. 22, lines 32-46.

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**Claim 1** is directed to a method for correcting a half tone pulse width count and recites the following acts:

1. determining the half tone pulse width count, the half tone pulse width count being a measure of the accumulated widths of a plurality of pulses associated with the printing of a plurality of half tone pixels;
2. determining a half tone level; and
3. calculating a corrected half tone pulse width count based on the half tone pulse width count and the half tone level.

The Examiner admits that Takeuchi fails to teach or suggest determining the half tone pulse width count that is a measure of the accumulated width of two or more pulses associated with the printing of half tone pixels. To address this point, the Examiner relies on Seto. Specifically, the Examiner makes the following statement regarding Seto.

Seto discloses an information recording apparatus, wherein data of a black pixel which is not subjected to smoothing is recorded while saving toner by controlling the print pulse width or the print pulse number upon recording of the black pixel on the basis of a print density command (abstract). Noting, for example, Figs. 54A-54E (especially 54C and 54D), the accumulated widths of plural pulses within a pixel are increased corresponding to an increase in density level. This feature enables the apparatus to maintain high print quality at areas requiring smoothing, while at the same time decreasing to consumption amount of toner (column 25, line 42 - column 26, line 4).

(emphasis added).

The Examiner's rejection is flawed as he has failed to assert that Seto teaches a half tone pulse width count or other variable that is a measure of the accumulated width of two or more pulses associated with the printing of half tone pixels. The simple statement that Seto discusses increasing the accumulated widths of plural pulses within a pixel corresponding to an increase in density level does not mean that Seto teaches a variable that is a measure of the accumulated width of two or more pulses associated with the printing of half tone pixels.

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Nonetheless, Claim 1 has been amended for clarity to recite that the half tone pulse width count is a measure of the accumulated widths of a plurality of pulses associated with the printing of a plurality of half tone pixels. By the Examiner's own statement, Seto discusses increasing the accumulated widths of plural pulses *within a pixel*. Assuming, for that sake of argument, that this is true, Seto mentions nothing of an accumulation of a plurality of pulse widths associated with the printing of a plurality of half tone pixels let alone a half tone pulse width count that is a measure of such an accumulation.

For at least these reasons, Claim 1 is patentable over Takeuchi as are Claims 2-6 due at least in part to their dependence from Claim 1.

Claim 7 is directed to a computer readable medium on which is embedded program instructions capable of automatically correcting a half tone pulse width count. The program instructions include instructions for implementing the method of Claim 1. For at least the same reasons Claim 1 is patentable, so are Claim 7 and Claims 8-11 which depend from Claim 17.

Claim 12 is directed to an apparatus that includes a processor system configured to implement the method of Claim 1. For at least the same reasons Claim 1 is patentable, so are Claim 12 and Claims 13-20 which depend from Claim 12.

**REJECTIONS UNDER 35 USC § 103:** The Examiner rejected Claims 3 and 9 as being obvious over Takeuchi in view of Seto and in further view of USPN 5,617,216 issued to Wada.

Claim 3 depends from Claim 1 and includes all the limitations of that base claim. For at least the same reasons Claim 1 is patentable, so is Claim 3.

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**Claim 9** depends from Claim 7 and includes all the limitations of that base claim. For at least the same reasons Claim 7 is patentable, so is Claim 9.

**CONCLUSION:** The foregoing is believed to be a complete response to the outstanding Office Action.

Respectfully submitted,

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March 9, 2006

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